

Analysis by electronic ...

S/096/63/000/005/001/011
E191/E481

approximations is applicable. The equation for $2n$ points of the contour can be replaced by a system of n linear equations. The free term of the equation contains the relative entry and exit angles as parameters. The solution can be plotted as a function of the entry angle. The method of solution is applicable to all practical geometry and flow parameters of blade cascades. This combination of advantages is not found in any other known integral equation. A numerical differentiation of the generalized potential is necessary at the end of the analysis but the errors due to differentiation do not affect the accuracy of preceding computations. The method of programming an electronic computer is discussed in detail. Profiles composed of circular arcs are chosen as a special example. A numerical example is given, dividing the profile contour into either 80 or 120 sections. The pitch/chord ratio was 0.646. The result is compared with a previously performed computation based on conformal mapping. Both are compared with experimental values showing close agreement. The special features of the program for profiles given by coordinate points are discussed. The machine time for one

Card 2/3

Analysis by electronic ...

S/096/63/000/005/001/011
E191/E481

numerical analysis is about 6 minutes. There are 6 figures.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut
(Central Boiler and Turbine Institute)

Card 3/3

ZHUKOVSKIY, N.P.; PETROV, A.S.

Determining indices for the dressing of complex iron ores with the help
of triangular diagrams. Obeg. no. 3:29-35:42. (MIRA 16:4)
(Iron ores—Testing) (Ore dressing)

ZHUKOVSKIY, M.I., doktor tekhn.nauk; SKIAR', N.A., kand.tekhn.nauk;
GUKASOVA, Ye.A., inzh.; MIKHAYLOVA, V.A., inzh.; NOVIKOVA, O.I., inzh.

Aerodynamic characteristics of blade profile lattices of the
terminal stages of K-300-240 LMZ turbines. Energomashinostroyeniye
8 no.10:29-33 0 '62. (MIRA 15:11)

(Steam turbines)

ZHUKOVSKIY, M.I., doktor tekhn.nauk; NOVIKOVA, O.I., inzh.; SKNAR', N.A.,
kand.tekhn.nauk

Design method and experimental development of a group of guide
blade profiles with increased values of the moments of resistance.
Teploenergetika 9 no.10:52-55 0 '62. (MIRA 15:9)

1. Tsentral'nyy kotloturbinnyy institut.
(Turbines—Blades)

ZHUKOVSKIY, M. I., Doc Tech Sci -- (diss) "Aerodynamic methods of profiling the gratings of turbomachines." Leningrad, 1959. 18 pp; (Ministry of Higher Education USSR, Leningrad Polytechnic Inst im M. I. Kalinin); 175 copies; free; list of author's works at end of text (14 entries); (KL, 17-60, 149)

PHASE I BOOK EXPLOITATION

SOV/4519

ZHUKOVSKIY
Gukasova, Yekaterina Aleksandrovna, Mikhail Isaakovich Zhukovskiy, Anatoliy
Mikhaylovich Zavodovskiy, Larisa Mikhaylovna Zysina-Molozhen, Nikolay Akimovich
Sknar', and Vsevolod Georgiyevich Tyryshkin

Aerodinamicheskoye sovershenstvovaniye lopatochnykh apparatov parovykh i gazovykh
turbin (Aerodynamic Improvement of Blading in Steam and Gas Turbines) Moscow,
Gosenergoizdat, 1960. 340 p. Errata slip inserted. 4,000 copies printed.

Eds.: V.S. Zhukovskiy, Doctor of Technical Sciences, Professor, and S.S.
Kutateladze, Doctor of Technical Sciences, Professor; Tech. Ed.: O.S.
Zhitnikova.

PURPOSE: This book is intended for engineers working in turbine-construction plants,
design offices, and power systems, and may also be used by aspirants and students
of advanced courses in power-machinery construction at schools of higher education.

COVERAGE: The book discusses aerodynamic methods for investigating, profiling, and
improving the blading of steam and gas turbines. Methods for calculating the
potential flow about airfoil cascades and for determining energy losses on the basis

Card 1/9

Aerodynamic Improvement of Blading (Cont.)

SOV/4519

of the boundary-layer theory are presented. Also discussed are methods for experimental study of the flow about blades in stationary cascades (with consideration of three-dimensional phenomena) and on rotating models. A special chapter (IX) treats the results of aerodynamic profiling of new blade cascades. The results presented are based on work performed at TsAGI imeni I.I. Polzunov. The authors thank Professor L.G. Loytsyanskiy for his advice. There are 124 references: 106 Soviet, 10 English, and 8 German.

TABLE OF CONTENTS:

Foreword	6
Ch. I. Theoretical Methods of Calculating Incompressible Flow Through Cascades of Airfoils (M.I. Zhukovskiy)	11
1. Plane rectilinear cascade	11
2. Calculating a cascade of blades according to a given velocity triangle	15
3. Solution of a direct problem based on conformal mapping of the region of incompressible fluid flow in an auxiliary plane	23
4. Inverse problem for a cascade of airfoils	28
5. Calculating flow over a cascade of airfoils according to a known circulation flow for an angle β	30
6. Calculating flow in curvilinear channels	33

Card 2/9

Aerodynamic Improvement of Blading (Cont.)

SOV/4519

Ch. II. Calculating Flow-Through Cascades at Subsonic Velocities
(M.I. Zhukovskiy)

1. Isentropic motion of a compressible fluid
2. Subsonic flow of a gas through a cascade of airfoils

39
39
45

Ch. III. Approximate Method of Calculating Profile Losses in
Cascades (L.M. Zysina-Molozhen)

1. Comparative evaluation of the precision of some methods of calculating profile losses
2. Method of calculating the size of impulse loss at the rear edge in flow through a cascade of airfoils
3. Determination of the dimensions of the transition region in the boundary layer of an airfoil
4. Sequence of the procedure of calculating the size of impulse loss at the rear edge in flow through a cascade of airfoils
5. Comparison of calculations with experimental values of losses in flow through impulse and reaction cascades of airfoils
6. Comparison of calculations with experimental values of losses in flow through the cascade of airfoils of a compressor

48
48
58
64
70
76
82

Card 3/9

Aerodynamic Improvement of Blading (Cont.)

SOV/4519

Ch. IV. Fundamentals of Modeling Aerodynamic Processes in a Turbine Cascade of Blades (N.A. Sknar')	87
1. Principles of modeling	87
2. Criteria of similitude and aerodynamic characteristics of cascades	88
3. Characteristic features of approximate modeling	91
Ch. V. Experimental Determination of Aerodynamic Characteristics of Cascades of Airfoils (Ye.A. Gukasova and N.A. Sknar')	100
1. Basic requirements for experimental methods	100
2. Preparation of the inflowing stream	101
3. Experimental cascades	105
4. Shaping the stream at the outflow from the cascade of blades	109
5. Experimental units	113
6. Measuring methods in the investigation of cascades in a compressible gas	116
7. Methods of working out experimental data	122

Card 4/9

Aerodynamic Improvement of Blading (Cont.)

SOV/4519

Ch. VI. Optical Methods of Investigating Plane Cascades of Airfoils
(I.M. Zysina-Molozhen)

1. General principles of the shade method and its application in investigation of flow about bodies	126
2. Application of Toepler's method in investigation of flow through cascades of airfoils	127
3. Principle of interference	130
4. Description and adjustment of an interferometer	133
5. Photographing the interference picture	136
6. Determination of the physical density of the investigated medium by the combination of bands. Numeration of bands	139
7. Determination of the density in the presence of uncombined interference bands in the field of vision	141
8. Determination of density in the absence of uncombined interference bands in the field of vision	144
9. Obtaining the scalar representation of the interferogram	145
10. Calculation of basic gas dynamic parameters	146
11. Some results of interferometric investigation of flow about bodies	146
	151

Card 5/9

Aerodynamic Improvement of Blading (Cont.)

80V/4519

12. Sample calculation of the characteristics of flow through a cascade of compressor airfoils according to an interferogram	155
Ch. VII. Three-Dimensional Flow in Cascades of Blades and End Losses (Ye.A. Gukasova)	158
1. Structure of three-dimensional flow at the ends of blades. Mechanism of the formation of end losses	158
2. Experimental methods for studying three-dimensional flow in banded cascades	176
3. Influence of geometric characteristics of cascades and flow parameters on end losses in banded cascades	181
4. Generalized empirical relationship for calculation of end losses in banded cascades	189
5. Characteristic features of three-dimensional flow through straight banded cascades in the presence of overlapping and axial clearances	193

Card 6/9

Aerodynamic Improvement of Blading (Cont.)

80V/4519

Ch. VIII. Experimental Investigation of Plane Cascades at High Subsonic and Supersonic Velocities (Ya.A. Gukasova)	198
1. Flow of a compressible gas in cascades of nozzles	198
2. Flow of a compressible gas in cascades of buckets	212
Ch. IX. Some Results of Aerodynamic Profiling and Finishing-off of Turbine Airfoils for Subcritical Flows at TsKTI (M.I. Zhukovskiy and N.A. Skmar')	219
1. General aspects	219
2. Vane profiles	221
3. Bucket profiles	222
4. Efficiency of new profiles	222
5. Influence of the method of formation of strengthened outflow edges on the operation of cascades	224
Ch. X. Methods of Experimental Investigation of Turbine Stages in Conditions of Rotation on Models at TsKTI (A.M. Zavadovskiy)	230
1. General aspects	230
2. Aerodynamic characteristics	238

Card 7/9

Aerodynamic Improvement of Blading (Cont.)

80V/4519

Ch. XI. Losses in a Turbine Stage and Consideration of the Possibility
of Calculating the Basic Characteristics of the Stage
(A.M. Zavadovskiy)

1. Profile and end losses	245
2. Fan losses	245
3. Losses due to leakage through radial clearances in nonshrouded vanes	252
4. Losses due to leakage through axial clearances in stages with shrouded vanes	258
5. Losses due to leakage through gaps in contacts of working- wheel shrouds	266
6. Influence of suction and induction in a turbine stage with shrouded vanes	267
7. Losses due to the flow of the working fluid in channels of a turbine stage with negative reaction	270
8. Some considerations on the possibility of determining basic characteristics of a turbine stage by calculation	272
	276

Card 8/9

Aerodynamic Improvement of Blading (Cont.)

SOV/4519

Ch. XII. Turbine Stage With Long Blades (V.G. Tyryshkin)	286
1. On designing turbine-stage blades with a small width to length ratio	286
2. Experimental investigation of the blading of turbine stages with small width to length ratios	294
3. On the influence of the degree of reaction and of basic constructional elements on the characteristics of a turbine stage with long blades	301
Appendix 1. A. Computation of Geometric Series Coefficients	
B. Computation of Functions According to Given Geometric Series Coefficients	312
Appendix 2. TsKTI Blade Cascade (See Ch. IX)	318
Bibliography	337

AVAILABLE: Library of Congress

Card 9/9

AC/pw/mas
12-29-60

ZHUKOVSKIY, M.I., kand.tekhn.nauk

Using hydroaerodynamic analogy for approximate investigation of supersonic flows in the cascades of blades. Teploenergetika 6 no.2:29-33 F '59. (MIRA 12:3)

1. TSentral'nyy kotloturbinnyy institut.
(Turbines) (Aerodynamics, Supersonic)

SOV/96-59-2-4/18

AUTHOR: Zhukovskiy, M.I., Candidate of Technical Sciences

TITLE: Use of the Water-Gas Analogy for the Approximate Investigation of Supersonic Flow over Blade Profiles (Primeneniye gidrogazoanalogii dlya priblizhennogo issledovaniya sverkhzvukovykh techeniy v reshetkakh prcfiley)

PERIODICAL: Teploenergetika, 1959, Nr 2, pp 29-33 (USSR)

ABSTRACT: There has been considerable interest in the analogy between the flow of gas and the motion of heavy incompressible liquid with a free surface in a channel. This is mainly because of the practical difficulties and expense of experimental investigation of super-sonic flow over turbine blades. The analogy is, of course, not accurate and the conditions necessary for high accuracy are stated and experimental conditions that have given particularly accurate results are briefly described. Expressions for the pressure, energy and velocity of the water and gas flows are then compared and are used to draw analogies between test results on water and on gas; for example it is shown that if the surfaces are geometrically similar in the two cases,

Card 1/3

SOV/96-59-2-4/18

Use of the Water-Gas Analogy for the Approximate Investigation of Supersonic Flow over Blade Profiles

the density of the gas is proportional to the depth of the water. The equations that apply below and above the critical speed of sound are given. The depths of water that can be used in the models depends on their size, thus in the installation at the Central Boiler Turbine Institute, the profile chords are about 300 to 350 mm and so the depth at the outlet from the blading can be about 20 mm. The formulae that must be used to translate test results into performance of real gases are then given. The method of determining outlet angles of flow in water model tests is explained. The experimental equipment is then described. The bottom of the equipment was made of polished glass with surface deviations of ± 0.2 mm. The co-ordinate trolley, 1,800 mm long, moved along rails and the carriage with the measuring tubes moved along the trolley. The instruments used to measure the depth are described and they are accurate to 0.1 to 0.2 mm, which is an error of about 1%. The blades were fixed down with wax and

Card 2/3

BOV/96-59-2-4/18

Use of the Water-Gas Analogy for the Approximate Investigation
of Supersonic Flow over Blade Profiles

the water flowed over them at controlled speeds. When conditions had settled down depth measurements were made. Tests were made with blading type TN-2 at Mach numbers up to 1.4 with a number of different pitches between blades and angles of attack. A comparison between the results obtained during tests in water and in air is made in Fig 4 and 5 and agreement is considered to be very satisfactory. There are 7 figures, 8 references of which 5 are Soviet, 1 English, 1 French and 1 German.

ASSOCIATION: Tsentral'nyy Kotloturbinnyy Institut (Central Boiler
Turbine Institute)

Card 3/3

ZHUKOVSKIY, M. I.

Opreделение chisto tsirkulatsionnogo obtekania reshetki profiloi. (Prikladnaia matematika i mekhanika, 1949, v. 13, no. 4, p. 457-458, diagrs.)

Title tr.: Determination of a purely circulatory flow past an airfoil cascade.

Reviewed by L. Bers in Mathematical Reviews, 1950, v. 11, no. 3, p. 225.

QA801.F7 1949

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955

ZHUKOVSKIY, M I

ZHUKOVSKIY, V.S., doktor tekhnicheskikh nauk, professor; ZHUKOVSKIY, M.I., kandidat tekhnicheskikh nauk; ZYSINA-MOLOZHEN, ~~kandidat tekhnicheskikh nauk~~; MARKOV, N.M., kandidat tekhnicheskikh nauk; SKNAR', N.A., kandidat tekhnicheskikh nauk; TYRISHKIN, V.G., kandidat tekhnicheskikh nauk

M.E.Deich's book "Technical gas dynamics." Reviewed by V.S.Zhukovskii and others. Teploenergetika 2 no.1:62-64 Ja '55.

(MIRA 8:9)

(Turbines--Fluid dynamics) (Gas flow) (Deich, M.E.)

ZHUKOVSKIY, M.I., doktor tekhn. nauk; GUKASOVA, Ye.A., inzh.; DROZD, Ye.Ye.,
inzh.

Development and experimental study of the cascade of profiles of the
root cross sections of the guide blade of the terminal stage of a large
steam turbine. Energomashinostroenie 11 no.9:3-6 S '65. (MIRA 18:10)

PHASE I BOOK EXPLOITATION

SOV/3983

Zhukovskiy, Mikhail Isaakovich

Raschet obtokaniya reshetok profiley turbomashin (Calculation of the Flow About Cascades of Blades in Turbines) Moscow, Mashgiz, 1960. 259 p. Errata slip inserted. 3,000 copies printed.

Reviewer: I. L. Povkh, Doctor of Technical Sciences, Professor; Ed.: N. M. Markov, Candidate of Technical Sciences; Ed. of Publishing House: V. P. Vasil'yeva; Tech. Ed.: A. I. Kontorovich; Managing Ed. for Literature on the Design and Operation of Machines (Leningrad Division, Mashgiz): F. I. Fetisov, Engineer.

PURPOSE: This book is intended for engineers and scientific workers specializing in turbine aerodynamics. It may also be used by students of advanced courses in power engineering.

COVERAGE: The book presents the basic aspects of the theory of ^{profile} cascades and discusses methods for designing cascades for given conditions and for calculating the potential flow about a given cascade. In addition to the general theory,

Card 1/5

Calculation of the Flow About Cascades (Cont.)

SOV/3983

Ch. II. Construction of Cascades of Profiles According to Given Geometric and Hydrodynamic Parameters	36
8. Basic problems of the theory of cascades	36
9. Calculation of cascades of profiles, based on a given system of sources, sinks, and vortices	39
10. Calculation of cascades of profiles, based on the conformal mapping of an auxiliary region	42
11. Construction of cascades of profiles which satisfy a given velocity distribution	61
12. Proposed design to improve a turbine cascade	67
Ch. III. Calculation of the Flow About an Arbitrary Cascade of Profiles (Direct Problem)	86
13. Use of integral relationships	86
14. Conformal mapping of an arbitrary cascade onto an auxiliary region	94
15. Calculation of cascades of profiles close to the given ones	106
16. Circular two-dimensional cascades	116
17. Approximate methods for calculating the flow about thick profiles of turbine cascades	119
18. Calculation examples	134

Card 3/5

Calculation of the Flow About Cascades (Cont.)

80V/3983

Ch. IV. Flow of a Compressible Fluid About Cascades	168
19. Subcritical flow about cascades	168
20. Basic relationships	175
21. Construction of the transformation function	180
22. Calculation of a gas flow about cascades of profiles, which practically coincide with the given ones	182
23. Calculation of cascades according to given aerodynamic and geometric parameters	183
24. Calculation examples	184
25. Calculation of cascades of profiles which satisfy a given velocity distribution	187
26. Effect of the compressibility of the fluid on the magnitudes of the outflow angle and of the circulation	192
27. Calculation of the angle of flow deflection in a transverse section	194
28. Use of the gas hydraulic analog method for the investigation of a gas flow	199

Card 4/5

Calculation of the Flow About Cascades (Cont.)

80V/3983

Ch. V. Design of Cascades of Profiles	214
29. Aerodynamics of cascades of profiles	214
30. Determination of the outflow angle and of the optimum inflow angle for cascades of profiles in turbines	224
31. Forming of the trailing and leading edges of a profile	228
32. On the problem of selecting the optimum velocity diagrams for cascades of profiles for turbines and compressors	232
33. Construction of a group of cascades of profiles for turbines	238
34. Variation in the shape of the entrance and exit parts of a profile	249
35. Calculation of the contour of a profile with continuously varying curvature	250
References	255

AVAILABLE: Library of Congress

Card5/5

AC/wbc/fal
8-17-60

ZHUKOVSKIY, Mikhail Issakovich; POVKH, I.L., prof., doktor tekhn.nauk,
retsensent; MARKOV, N.M., kand.tekhn.nauk, red.; VASIL'YEVA,
V.P., red.izd-va; KONTOROVICH, A.I., tekhn.red.

[Calculating the flow about cascades of profiles of turbomachines]
Raschet obtekania reshetok profilei turbomashin. Moskva, Gos.
nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 259 p.

(MIRA 13:4)

(Turbomachines--Aerodynamics)

ZHUKOVSKIY, M.I., doktor tekhn. nauk

Method for designing subsonic and transonic lattices of the blade
profiles of turbomachines. Energomashinostroenie 10 no.6:1-4 Je '64.
(MIRA 17:9)

ZHUKOVSKIY, M. K.

"The Measuring Technique for Pressure and Vacuum" Moscow 1952

ZHUKOVSKIY, M.M.

White Russian S.S.R. Prom.koop. no.1:5-6 Ja '57.

(MLRA 10:4)

1. Predsedatel' pravleniya Belpromsoвета.
(White Russia--Cooperative societies)

ZHUKOVSKIY, M.

A disease can be prevented. Okhr.truda i sots.strach. no.9:
78-80 S '59. (MIRA 13:1)

1. Uchenyy sekretar' Prezidiuma AMN SSSR.
(DYSENTERY)

LEVIN, M.S., kand.tekhn.nauk, ~~ZHULIN, M.T., kand.tekhn.nauk~~

Increasing the calculated distance between poles for rural overhead
steel aluminum lines. Nauch. trudy VIESKH 4:304-315 '59.

(MIRA 13:11)

(Electric lines--Overhead)

ZHUKOVSKII, N.

"Planning medical research in pediatry." Tr. from the Russian. p. 128.
(ANALELE ROMANO-SOVIETICE. SERIA PEDIATRIE, Series a III-a, Vol. 6, no.6, Nov./Dec.
1953, Bucuresti, Rumania)

SO: Monthly List of East European Accessions, L. C., Vol. 3, No. 4, April 1954, Uncl.

N.E. ZHUKOVSKI, URANOSOV, A.

Thr father of Russian aviation, p.10.

(Aripile Patriel, Vol. 3, No.1. Jan 1957, Bucuresti, Rumania)

SO: Monthly List of East European Accessions (ERAL) Lc. Vol. 6, No. 8, Aug 1957. Uncl.

ZHUKOVSKIY, N. I.

29723

Myery po uluchshyeniyu organizatsii, povyshyeniyu proizvoditel'nosti i
uporyadochyiuyu oplaty truda v kolzhozakh. V sb: Michurinskuyu
Nauku--v s.-kh. Proizvodstvo. Novosibirsk, 1949, S. 204-23.

So: Letopis' Nol 40

ZHUKOVSKIY, N.I.

Types and dimensions series of devices and means of automation.
Standartizatsia 25 no. 5:39-40 My '61. (MIRA 14:5)
(Automatic control) (Standards, Engineering)

ZOBACHEV, I.G.; UGRENINOV, N.G.; PROTOPOPOV, N.N.; ZHUKOVSKIY, N.I.;
KHRAMOV, A.S.; RYABOV, I.S.; LAZOVNIKOV, M.A., tekhn. red.

[The city of Novosibirsk and Novosibirsk Province] Gorod Novosibirsk i Novosibirskaya oblast'. Novosibirsk, Novosibirskoe oblastnoe upravlenie "Poligrafizdat," 1948. 166 p.

(MIRA 16:1)

(Novosibirsk) (Novosibirsk Province)

ZHUKOVSKIY, N.I.

Pneumatic-electric converters. Standartizatsia 26 no.2:49-50
F '62. (MIRA 15:2)
(Pneumatic control)

ZHUKOVSKIY, N.I.

Manometers and vacuum gauges; wrist watches. Standartizatsiia 28
no.8:57-58 Ag '64. (MIRA 17:11)

ZHUKOVSKIY, N.I., inzhener.

Alarm clocks of the Yerevan watch factory work badly. Standartizatsia
no.2:26-28 Mr-Apr '54. (MIRA 7:6)

1. Upravleniye po standartizatsii.
(Yerevan--Clockmaking and watchmaking)

ZHUKOVSKIY, N.I.

Pneumatic devices and equipment for automatic control. Standard-
tizatsiia 24 no.8:38-39 Ag '60. (MIRA 13:9)
(Pneumatic control)

ZHUKOVSKIY. N.I.

Differential manometers. Standartizatsiya 24 no.9:49-50 S '60.

(MIRA 13:9)

(Manometer--Standards)

ZHUKOVSKIY, Nikolay Ivanovich; SINAGOV, V.N., redaktor; LISINA, V.M.,
~~skhizhicheskii redaktor~~

[Agriculture of Novosibirsk Province in the sixth five-year plan]
Sel'skoe khoziaistvo Novosibirskoi oblasti v shestoii piatiletke.
[Novosibirsk] Novosibirskoe kn-vo, 1956. 71 p. (MIRA 10:2)
(Novosibirsk Province--Agriculture)

629N/5
723
.26

Zhukovskiy, Nilolay Ivanovich

Novoye v sel'skom khozyaystve sibir; po materialam
novosiberskoy oblasti [New methods of agriculture in Siberia]
Moskva, sel'khozgiz, 1958.

140 p. Tables.

28(3)

S/028/60/000/01/021/033
D041/D002

AUTHOR:

Zhukovskiy, N.I.

TITLE:

The Tomsk Manometer Plant is Improving the Quality of Instruments

PERIODICAL:

Standartizatsiya, 1960, Nr 1, pp 52-53 (USSR)

ABSTRACT:


This is a letter to the editors. For years, the Tomskiy manometrovyy zavod (Tomsk Manometer Plant) manufactured manometers, vacuum manometers, and vacuum gages of poor quality. After 3 to 5 months, most broke down. At the June Plenary Session of the TsK KPSS (CC of the CPSU), the plant was blamed for hampering the introduction of automation in production processes. By the end of October 1959, the Komitet standartov, mer i. izmeritel'nykh priborov (Committee of Standards, Measures, and Measuring Instruments) inspected the plant and stated a considerable quality improvement in the instruments had been made. The plant has improved the manometer design, uses new

Card 1/3

S/028/60/000/01/021/033
D041/D002

The Tomsk Manometer Plant is Improving the Quality of Instruments

technical processes, has new furnaces with automatic temperature control (improving the quality of manometer springs), etc. The test laboratories are provided with new equipment for testing the instruments for transportability, vibration proofness, effect of pressure variations, strength of the springs, etc., as required by the "GOST 8265-59" standard. The plant needs a metallographic laboratory as well as mechanical laboratories for special springs, has yet to develop shakeproof manometers, standardize dimensions and start experimental work to find proper materials for instruments urgently needed in many industry branches where manometers have to be resistant to corrosive and viscous medium. The Tomskiy Sovnarkhoz can improve the work conditions by taking measures to speed up the construction of the new plant shops. A conference of the plant's staff



Card 2/3

S/028/60/000/01/021/033
D041/D002

The Tomsk Manometer Plant is Improving the Quality of Instruments
with the Sovnarkhoz and delegates from technical vuzes
of Tomsk convened to discuss measures for further
improvement of the quality of manometers.

Card 3/3

28(3)

S/028/60/000/01/021/033
D041/D002

AUTHOR:

Zhukovskiy, N.I.

TITLE:

The Tomsk Manometer Plant is Improving the Quality of Instruments

PERIODICAL:

Standartizatsiya, 1960, Nr 1, pp 52-53 (USSR)

ABSTRACT:


This is a letter to the editors. For years, the Tomskiy manometrovyy zavod (Tomsk Manometer Plant) manufactured manometers, vacuum manometers, and vacuum gages of poor quality. After 3 to 5 months, most broke down. At the June Plenary Session of the TsK KPSS (CC of the CPSU), the plant was blamed for hampering the introduction of automation in production processes. By the end of October 1959, the Komitet standartov, mer i izmeritel'nykh priborov (Committee of Standards, Measures, and Measuring Instruments) inspected the plant and stated a considerable quality improvement in the instruments had been made. The plant has improved the manometer design, uses new

Card 1/3

S/028/60/000/01/021/033
D041/D002

The Tomsk Manometer Plant is Improving the Quality of Instruments

technical processes, has new furnaces with automatic temperature control (improving the quality of manometer springs), etc. The test laboratories are provided with new equipment for testing the instruments for transportability, vibration proofness, effect of pressure variations, strength of the springs, etc., as required by the "GOST 8265-59" standard. The plant needs a metallographic laboratory as well as mechanical laboratories for special springs, has yet to develop shakeproof manometers, standardize dimensions and start experimental work to find proper materials for instruments urgently needed in many industry branches where manometers have to be resistant to corrosive and viscous medium. The Tomskiy Sovnarkhoz can improve the work conditions by taking measures to speed up the construction of the new plant shops. A conference of the plant's staff



Card 2/3

S/028/60/000/01/021/033
D041/D002

The Tomsk Manometer Plant is Improving the Quality of Instruments
with the Sovnarkhoz and delegates from technical vuzes
of Tomsk convened to discuss measures for further
improvement of the quality of manometers.

Card 3/3

ZHUKOVSKIY, N. I.

Tractor and field brigades in Novosibirsk Province. Nauka i pered.op.v
sel'khoz. 7 no.7:81-83 JI '57.
(MLHA 10:8)

1. Predsedatel' ispolkoma Novosibirskogo oblastnogo Soveta
deputatov trudyashchikheya.
(Novosibirsk Province--Collective farms)

ZHUKOVSKIY, Nikolay Ivanovich,; LAPIDUS, M.A., red.; ZUBRILINA, Z.P., tekhn. red.

[Innovations in Siberian agriculture; based on data from
Novosibirsk Province] Novoe v sel'skom khoziaistve Sibiri; po
materialam Novosibirskoi oblasti. Moskva, Gos. izd-vo sel'khoz.
lit-ry, 1958. 140 p. (MIRA 11:11)
(Novosibirsk Province--Agriculture)

ZHUKOVSKIY, N.I., inzh.; KUZNETSOVA, M.I., otv. za vypusk; KASHIRIN,
A.G., tekhn. red.

[Types and basic parameters of instruments and automatic controllers in the state standards of the U.S.S.R.] Tipy osnovnye parametry priborov i avtomaticheskikh reguliatorov v gosudarstvennykh standartakh SSSR. Izd. ofitsial'noe. Moskva, Gos.izd-vo standartov, 1961. 751 p. (NIRA 15:2)
(Automatic control—Standards) (Instruments—Standards)

ZHUKOVSKIY, N.I.

Converters, regulators and indicators. Standartizatsiia 26
no.4:41-43 Ap '62. (MIRA 15:3)
(Electric instruments--Standards) (Pneumatic control--Standards)
(Manometer--Standards)

ZHUKOVSKIY, N.I.

Carry out the decision of the first all-Union conference
on flexible sensitive elements. Izv.tekh. no.9:57-58 8
'61.

(MIRA 14:8)

(Transducers)

8/115/60/000/007/001/011
B016/B058

AUTHOR: Zhukovskiy, N. I.

TITLE: Improve the Quality of Pressure Meters !

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 7, pp. 8 - 12

TEXT: The author demands a considerable improvement of the quality of pressure meters, according to the tasks set by the 21st Congress of the Communist Party of the USSR (June 1959) and the Plenum of the Party Central Committee (July 1960). The poor quality of these instruments was ascertained in continuous controls by organs of the Komitet standartov, mer i izmeritel'nykh priborov (Committee on Standards, Measures, and Measuring Instruments). This applies particularly to measuring instruments for pressure, vacuum, and the consumption of liquids and gases. The faults of these instruments are due to poor manufacture of the sensitive elements. Lack of experimental and research studies in this field is a further cause. As an example, the author mentions that 50% of the manometers of the Tomskiy zavod (Tomsk Plant) become unfit for use after 4 to 8 months, although they should operate satisfactorily

Card 1/4

Improve the Quality of Pressure Meters :

S/115/60/000/007/001/011
B016/B058

for 3 to 5 years. The working processes prescribed for the Tomsk Plant were badly infringed, as shown by some examples. Various working processes were also obsolete in many cases. All that has caused considerable damage to national economy (not less than 10 million rubles). The quality of manometers could be improved by measures taken by the Tomsk sovnarkhoz, the party organs, and the influence of the Committee on Standards, Measures, and Measuring Instruments. The author gives a detailed description of the improvements introduced. Moreover, the control- and test laboratories of the plant were equipped with new test instruments, enabling the plant to study and eliminate the faults of the instruments. The production of several new instruments according to GOCT 8625-59 (GOST 8625-59) is to start in 1960 and 1961. The measures for this purpose are enumerated. At the same time, the Committee checked the quality of instruments made by the Moskovskiy zavod "Manometr" (Moscow "Manometr" Plant), and it was established that 50% of the thermometers produced there exceeded the specifications laid down for accuracy by the double. 15% of the thermometers failed owing to insufficient air tightness. Further faults are enumerated. 20% of the sample manometers did not meet the requirements of GOCT 6521-53 (GOST 6521-53). ✓

Card 2/4

Improve the Quality of Pressure Meters :

S/115/60/000/007/001/011
B016/B058

All the above faults were detected on manometers which had been accepted by the OTK. In the case of the differential manometers of the type ДМ-6 (DM-6) with secondary instruments ЭПИД (EPID), regulation stops functioning after short service life. The quality of the manometers could be somewhat improved in 1959 (9.4% rejects) as compared to 1957-58 (20-25% manometers returned to the assembly department). Nevertheless, the most important task, i.e. supply of high-quality control- and sample manometers, was not fulfilled by the plant. A laboratory for sensitive elements has not been organized so far. Inadequacies of manufacture in the following plants are described next: Kazanskiy zavod "Teplokontrol'" (Kazan' "Teplokontrol'" Plant), mediko-instrumental'nyy zavod "Krasnogvardeyets" ("Krasnogvardeyets" Plant for Medical Instruments), and Odeskiy zavod sanitarno-meditsinskogo oborudovaniya (Odessa Plant for Sanitary Medical Installations), where the manufacture of membrane instruments for measuring blood pressure was forbidden by order of the Ministerstvo zdoravookhraneniya SSSR (Ministry of Health Protection, USSR); Khar'kovskiy zavod kontrol'no-izmeritel'nykh priborov (Khar'kov Plant for Measuring- and Control Instruments); Riazskiy zavod "Avto-elektropribor" (Riga "Avtoelektropribor" Plant); zavod "Tizpribor"

Card 3/4

Improve the Quality of Pressure Meters !

S/115/60/000/007/001/011
B016/B058

("Tizpribor" Plant). Recently, the NIITI has designed some apparatus
for the testing of instruments to be manufactured.

✓

Card 4/4

SA
sect. A

Radioactivity

5827. Gamma radiation of Ag¹¹⁰. B. S. DZHALAPIN,
N. N. ZAKHAROV, AND YU. V. KNOLOV. *Uzbek
Russ. Period. Li. Broshuren*, 4, 349-70 (Dec., 1951).
Full translation of article abstracted in Abstr. 9671
(1951).

SA

539.114

A 53 BB

6433. *Production of Co⁶⁰. B. DZIMILIN, M. ZILIKHMAN AND YU. KUKHAROV. Dokl. Akad. Nauk, SSSR, 77 (No. 2) 233-6 (1951) In Russian.*

This was measured using the Compton-electron spectrometer of Abur. 3377 (1950) with 2 mm slits before both counters, the walls of which were 17 μ collipans. To reduce scattering, the spectrometer was filled with He at 32 cm Hg. The source was a 4 mm dia. Co cylinder, 8 mm long. Lines were found corresponding to the 2 γ -rays (1171.5 \pm 1.0 and 1331.6 \pm 1.0 keV) measured by Lind *et al.* [Abur. 2639 (1950)]. These values were used for calibration as also were lines from NaC and ThC² between 606 and 2620 keV. Over this range the measured γ -energy was \pm 1% high. Relative intensity measurements have to be corrected for dependence on energy of (a) the angular distribution of the Compton electrons, (b) absorption of γ -rays in source and entrance window, (c) counter efficiency. It is concluded that the 2 principal lines have an intensity ratio 0.90 \pm 0.04 which confirms that they are emitted in cascade. There are no other lines between 200 and 1800 keV of $>$ 5% of the intensity of the principal lines.

J. C. G. JENNINGS

ASH-543 METALLURGICAL LITERATURE CLASSIFICATION

FROM STEELAGE

FROM 504190

RELATIVE

RELATIVE

117 AND TWO GROUPS
 PROCESSES AND PROPERTIES INDEX

244
 γ RADIATION OF Ag¹¹⁰. B. S. Dehalepov, M. N. Zhukivskii,
 and Yu. V. Khol'nov. Doklady Akad. Nauk S.S.S.R. 77, No. 4,
 597-8(1951) Apr. 1. (In Russian)

The γ-ray spectrum of Ag¹¹⁰ is shown. Four lines of 632
 27 (1.00), 886 ± 9 (1.03), 1388 (0.16), and 1484 (0.22) kev.
 where the figures in parentheses are relative intensities,
 were found. These are compared with the results of Siegbahn
 (Phys. Rev. 77, 233(1950); NSA 4-1577); a line at 930 kev
 given by this author was not resolved in the present experi-
 ment.

ASM-35A METALLURGICAL LITERATURE CLASSIFICATION

17001 17002 17003 17004 17005 17006 17007 17008 17009 17010 17011 17012 17013 17014 17015 17016 17017 17018 17019 17020 17021 17022 17023 17024 17025 17026 17027 17028 17029 17030 17031 17032 17033 17034 17035 17036 17037 17038 17039 17040 17041 17042 17043 17044 17045 17046 17047 17048 17049 17050 17051 17052 17053 17054 17055 17056 17057 17058 17059 17060 17061 17062 17063 17064 17065 17066 17067 17068 17069 17070 17071 17072 17073 17074 17075 17076 17077 17078 17079 17080 17081 17082 17083 17084 17085 17086 17087 17088 17089 17090 17091 17092 17093 17094 17095 17096 17097 17098 17099 17100 17101 17102 17103 17104 17105 17106 17107 17108 17109 17110 17111 17112 17113 17114 17115 17116 17117 17118 17119 17120 17121 17122 17123 17124 17125 17126 17127 17128 17129 17130 17131 17132 17133 17134 17135 17136 17137 17138 17139 17140 17141 17142 17143 17144 17145 17146 17147 17148 17149 17150 17151 17152 17153 17154 17155 17156 17157 17158 17159 17160 17161 17162 17163 17164 17165 17166 17167 17168 17169 17170 17171 17172 17173 17174 17175 17176 17177 17178 17179 17180 17181 17182 17183 17184 17185 17186 17187 17188 17189 17190 17191 17192 17193 17194 17195 17196 17197 17198 17199 17200 17201 17202 17203 17204 17205 17206 17207 17208 17209 17210 17211 17212 17213 17214 17215 17216 17217 17218 17219 17220 17221 17222 17223 17224 17225 17226 17227 17228 17229 17230 17231 17232 17233 17234 17235 17236 17237 17238 17239 17240 17241 17242 17243 17244 17245 17246 17247 17248 17249 17250 17251 17252 17253 17254 17255 17256 17257 17258 17259 17260 17261 17262 17263 17264 17265 17266 17267 17268 17269 17270 17271 17272 17273 17274 17275 17276 17277 17278 17279 17280 17281 17282 17283 17284 17285 17286 17287 17288 17289 17290 17291 17292 17293 17294 17295 17296 17297 17298 17299 17300 17301 17302 17303 17304 17305 17306 17307 17308 17309 17310 17311 17312 17313 17314 17315 17316 17317 17318 17319 17320 17321 17322 17323 17324 17325 17326 17327 17328 17329 17330 17331 17332 17333 17334 17335 17336 17337 17338 17339 17340 17341 17342 17343 17344 17345 17346 17347 17348 17349 17350 17351 17352 17353 17354 17355 17356 17357 17358 17359 17360 17361 17362 17363 17364 17365 17366 17367 17368 17369 17370 17371 17372 17373 17374 17375 17376 17377 17378 17379 17380 17381 17382 17383 17384 17385 17386 17387 17388 17389 17390 17391 17392 17393 17394 17395 17396 17397 17398 17399 17400 17401 17402 17403 17404 17405 17406 17407 17408 17409 17410 17411 17412 17413 17414 17415 17416 17417 17418 17419 17420 17421 17422 17423 17424 17425 17426 17427 17428 17429 17430 17431 17432 17433 17434 17435 17436 17437 17438 17439 17440 17441 17442 17443 17444 17445 17446 17447 17448 17449 17450 17451 17452 17453 17454 17455 17456 17457 17458 17459 17460 17461 17462 17463 17464 17465 17466 17467 17468 17469 17470 17471 17472 17473 17474 17475 17476 17477 17478 17479 17480 17481 17482 17483 17484 17485 17486 17487 17488 17489 17490 17491 17492 17493 17494 17495 17496 17497 17498 17499 17500 17501 17502 17503 17504 17505 17506 17507 17508 17509 17510 17511 17512 17513 17514 17515 17516 17517 17518 17519 17520 17521 17522 17523 17524 17525 17526 17527 17528 17529 17530 17531 17532 17533 17534 17535 17536 17537 17538 17539 17540 17541 17542 17543 17544 17545 17546 17547 17548 17549 17550 17551 17552 17553 17554 17555 17556 17557 17558 17559 17560 17561 17562 17563 17564 17565 17566 17567 17568 17569 17570 17571 17572 17573 17574 17575 17576 17577 17578 17579 17580 17581 17582 17583 17584 17585 17586 17587 17588 17589 17590 17591 17592 17593 17594 17595 17596 17597 17598 17599 17600 17601 17602 17603 17604 17605 17606 17607 17608 17609 17610 17611 17612 17613 17614 17615 17616 17617 17618 17619 17620 17621 17622 17623 17624

ZHUKOVSKIY, N.

USSR/Physics - Gamma Radiation

11 Sep 52

"Gamma Radiation of Sb¹²⁴," K. Gromov, B. Dzheleпов, N. Zhukovskiy,
A. Silant'yev, Yu. Khol'nov

"Dok Ak Nauk SSSR" Vol 86, No 2, pp 255-258

By means of the gamma spectrometer that employs the Compton electron, the authors investigate gamma radiation of subject antimony isotope, under conditions similar to those of the investigation of gamma spectra of Co⁶¹ and Ag¹¹⁰ in 1951 by the authors. The source of gamma rays was activated metallic antimony in the amt of 0.7 gram. Discuss exptl curve of current strength in an electromagnet versus number of coincidences per unit of time. Submitted by Acad P. I. Lukirskiy 2 Jul 52.

235T98

ZHUKOVSKIY, N.I.

Electric clocks. Standartizatsiia 28 no.2:49-50 F '64.
(MIRA 17:3)

ZHUKOVSKIY, N. I.

Make wider use of the calorimeters in national economy. Izv. tekhn.
no. 11:36-37 N '60. (MIRA 13:11)

(Calorimeters)

ZHUKOVSKIY, N.I.

Improve the quality of pressure-measuring instruments.
Izm.tekh. no.7:8-12 JI '60. (MIRA 13:7)
(Manometer) (Instrument manufacture)

ZHUKOVSKIY, N. N.

USSR/Nuclear Physics - Cu, Gamma Emission Jul/Aug 53

"Gamma Emission of Cu^{64} ," B. S. Dzhelepov, N. N. Zhukovskiy, V. P. Prikhodtseva and Yu. V. Kholnov, Radio Inst, Acad Sci USSR

Iz Ak Nauk, Ser Fiz, Vol 17, No 4, pp 511-517

Studied in the gamma-spectrum of Cu^{64} the line $h\nu = 1.34$ MeV, also observed by F. Kurie and M. Ter-Pogossian (Phys Rev 74, 677 (1948)). Worked with gamma spectrometer, using recoil electrons. Obtained the same results as previously (DAN 86, 497 (1952)). Indebted to A. V. Kudryavtseva, L. N. Zyryanova and V. Chumin. Rec 9 Jul 53.

272T51

ZHUKOVSKIY, N. N.

USSR/Nuclear Physics - Gamma-Spectrometer Jul/Aug 53

"Gamma Spectrometer With Improved Focusing," B. S. Dzhelepov, N. N. Zhukovskiy, A. S. Karamyan and S. A. Shestopalova, All-Union Sci-Res Inst of Metrology; Radium Inst, Acad Sci USSR

Iz Ak Nauk, Ser Fiz, Vol 17, No 4, pp 518-520

Attempt to improve resolution of gamma spectroscopy described previously by Dzhelepov et al. (DAN 62, 613 (1948); 77, 233 (1951)). Because this spectroscopy is based on recoil electrons, author named it "elotron." Indebted to V. Chumin and S. Rusinova. Rec 16 Jul 53.

272152

ZHUKOVSKIY, N.N.

USSR/ Physics - Instruments

Card 1/ Pub. 43 - 5/5

Authors : Dzhelepov, B. S.; Zhukovskiy, N. N.; and Khol'nov, Yu. V.

Title : Ritron - gamma-spectrometer utilizing output electrons

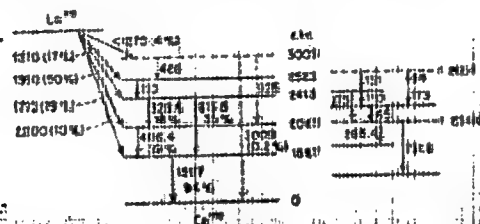
Periodical : Izv. AN SSSR. Ser. fiz. 18/5, 599 - 624, Sep - Oct 1954

Abstract : The Ritron-magnetic gamma-spectrometer described in this report can be used for the study of gamma-spectra of radioactive substances with energies of from 300 - 4000 kev. With respect to resolving power the instrument was found to be inferior to the gamma-spectrometer with improved focus "Elotron", however, it has a certain advantage over the former, namely, it utilizes only uniform magnetic fields which makes it possible to calculate the form of the spectral line, spectral sensitivity, luminosity and other properties of the instrument. Some results obtained by the application of the Ritron-spectrometer are listed. Twenty-seven references; 15 USSR; 1 Canadian; 1 English; 1 Dutch and 9 USA (1947 - 1954). Tables; diagrams; drawings.

Institution: Academy of Sciences USSR, Radium Institute

Submitted: October 4, 1954

ZHUKOVSKIY, N.N.

[illegible]

The conventional basis, and the stoichiometries of the reactions are cited. The properties and the decay of the various isotopes K^{40} , Ca^{40} , Ba^{138} , and Ba^{134} are discussed. A diagram is drawn on a unitary temperature scale of the nuclei and transitions in these atoms. The probability of decay of K^{40} is attributed to the presence of

11-11-61

ZHUKOVSKIY, N.N.

NU
 ✓ Measurement of gold-198 by Zhukovskiy, N.N., Zhukovskiy, N.N., and Zhukovskiy, N.N. Tr. Vsesoyuzn. nauch. konf. po fiz. i khim. radioaktiv. v. 19, 201-204 (1965). The γ -spectrum of a ^{198}Au cylinder irradiated by neutrons was investigated with a γ -spectrometer. The energy and the relative intensity of the lines are 412 ± 4 (100), 661 ± 7 (1.11 \pm 0.05), 1063 ± 1.0 e.v. (0.21 \pm 0.02). The decay scheme is:



③
 100
 661
 1063

ZHUKOVSKIY, N.N.

469

GAMMA RADIATION FROM ^{137}Cs N. N. Zhukovskiy

N. N. Zhukovskiy and V. G. Kostikov (Kievskiy Basium, U.S.S.R.)

(Inst. J. Invest. Akad. Nauk S.S.S.R. Ser. Fiz. 18, 290-9

(1955), May-June, (in Russian)

Gamma spectral lines obtained with a spectrometer with improved focusing are discussed. The conversion electrons were measured with cellophane targets of 17 and 50 μ . (R.V.J.)

Orig
MST

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R002065010013-3

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R002065010013-3"

2 Zhukovskiy, N.N.

48-7-8/21

AUTHORS: Dzhelepov, B.S., Zhukovskiy, N.N., Nedovesov, V.G., Shchukin, G.Ye.

TITLE: The γ -Radiation of Eu^{152,154} (γ -izlucheniye Eu^{152,154})

PERIODICAL: Izvestiya Akad. Nauk SSSR, Ser. Fiz., 1957, Vol. 21, Nr 7, pp. 966 - 972 (USSR)

ABSTRACT: The γ -radiation of Eu^{152, 154} was investigated by many scientists, but the complexity of the γ -spectrum and the great interest shown to the nucleus of Eu¹⁵² induced the authors to repeat the investigation of the γ -spectrum of the isotope mixture of Eu^{152,154} by means of an improved "electron". The conditions of this work are described. The form of lines and the graduation according to energies are shown on figure 1 and the experimental curve of the spectral sensitivity of the "electron" is shown on figure 2. The experimental curve of the γ -spectrum of Eu^{152,154} is represented on figure 3. According to the taking into account of the dependence of the form of lines on the energy (figure 1) the γ -spectrum, after drawing off the basis, is decomposed into individual components. Figures 4 to 7 record such a decomposition for the sections $H\gamma$ = 1400 to 2250, 2800 to 4000, 4000 to 5000 and 5000 to 6300 Gs. cm. The summary curve

Card 1/2

Zhukovskiy, N.N.

48-7-9/21

AUTHORS:

Dzhelepov, B.S., Zhukovskiy, N.N., Kondakov, Yu.G.

TITLE:

The γ -Radiation of Ag^{110} (γ -izlucheniye Ag^{110})

PERIODICAL:

Izvestiya Akad. Nauk SSSR, Ser. Fiz., 1957, Vol. 21, Nr 7, pp. 973 - 977 (USSR)

ABSTRACT:

Figure 1 records the fundamental data on the decay scheme of Ag^{110} collected hitherto. This work determined the relative intensities of 12 γ -lines of Ag^{110} , whereby it was made possible to check the balance of the intensities on the individual levels as well as to determine the multilevels of a number of transitions. The γ -radiation of Ag^{110} was investigated by means of a γ -spectrometer with improved focusing and an "elotrol" which utilized the emitted electrons. A silver chip of 7,6 g weight activated by neutrons served as source. The measurements were carried out 3 months after the preparation of the source. The total view of the γ -spectrum of Ag^{110} is represented on figure 2. After elimination of the background the spectrum was decomposed into its components which is shown by figures 3 to 5 for the sections 2700 - 3500, 3400 - 4200 and 5200 - 6400 Ga. cm. 12 γ -lines were determined in the γ -spectrum. The resulting

Card 1/2

48-7-9/21

The γ -Radiation of Ag^{110}

data are given in table 1 where they are at the same time compared to the data obtained by other authors. Table 2 explains the obtained multifields of the γ -transitions. The relative intensity of the weak conversion lines is only inexactly known, therefore the determination of the multifields of the corresponding γ -transitions cannot be carried out with accuracy. There are 2 tables, 5 figures and 49 references, 11 of which are Slavic.

ASSOCIATION: Radium Institute im. V.G. Khlopin, AN USSR
(Radiyevyy institut imeni V.G. Khlopina Akademii nauk SSSR)

AVAILABLE: Library of Congress

Card 2/2

Zhukovskiy, N. N.

48-12-9/15

AUTHORS: Dzhelepov, B. S. , Zhukovskiy, N. N. , Predovskiy, F. A.

TITLE: New Data on the γ -Spectrum of Sb^{124} (Novyye dannyye of γ -spektra Sb^{124})

PERIODICAL: Izvestiya AN SSSR, Seriya Fizicheskaya, 1957, Vol. 21, Nr 12, pp. 1614 - 1618 (USSR)

ABSTRACT: In order to give a precise determination of the earlier obtained (reference 1) data on the relative intensity of the γ -lines of Sb^{124} the authors made new investigations of the γ -radiation of Sb^{124} in the elotron under new more favorable conditions (with regard to light intensity and dissolving power). At their disposal was metallic antimony, activated by neutrons , with a weight of $\sim 1,5$ g and a total activity of $\sim 1,5$ Cu. At the beginning of the measurements the age of the preparations was 40 days. Especially carefully investigated were 1.) The soft range of the γ -spectrum $H\phi = 2500 + 3300$ Gs.cm in which earlier with gas-filling (reference 1) the elotron could not sufficiently sharply separate the γ -lines $h\nu = 603$ keV and 646 keV. 2.) The hard range $H\phi = 4800 + 6300$ Gs.cm in which the authors discovered new unknown (till then) γ -lines, where the intensity of those decreased with a period of ~ 60 days.

Card 1/3

48-12-9/15

New Data on the γ -Spectrum of Sb^{124}

The curve of the spectral sensitivity of the apparatus under the new conditions (reference 2) permitted precisely to determine the values of the relative intensity of all γ -lines of Sb^{124} . Three γ -lines $h\nu = 603, 646$ and 723 keV were, as earlier, determined in the observations. The precisely determined values of the relative intensity of the γ -lines are given in a table, as well as the multipolarity of some γ -transitions calculated by the authors on the basis of own observations of the intensity of γ -lines and the data by Zolotavin and others (reference 3) on the relative intensities of the K-conversion-lines of Sb^{124} . The scheme of the decay Sb^{124} is given. It is based on the data collected until May 1956 (references 3 and 5) which were more precisely determined here. Regarding the multipolarity of the transitions it is shown that it may with certainty be assumed that the levels 603 and 2295 keV have the characteristics 2^+ and 3^- . The characteristic of the other levels is less certain, partially because of the possibility of a doublet-structure of the lines $h\nu = 646$ and 723 keV. A comparison with other even-even nuclei shows that the two-quanta oscillation-excitation of Te^{124} in the range 1320 keV ($E_2/E_1 \approx 2,2$) must form a triplet $0^+ 2^+ 4^+$. Of these 3 possibilities the characteristic 2^+ must be ascribed to the level 1326 keV, as a) a transition $1326 \rightarrow 0$ and b) a transition $2295 \rightarrow 1326$ (line

Card 2/3

48-12-9/15

New Data on the γ -Spectrum of Sb^{124}

$h\nu$ -969 keV) of the type $E 1 + M 2$ is observed. The data on the lines 646, 1047 and 1450 keV give rise to the assumption that the level 1248 keV is of type 4^- . In the last chapter the balance of the intensities is investigated. It is shown that in case that the levels 1248 and 1326 keV possess the characteristics 4^+ and 2^+ and belong to a triplet, the probability of a β -decay of Sb^{124} (whose original state is of type 3^-) must almost be equal in these levels. There are 4 figures, 2 tables, and 6 references, 5 of which are Slavic.

ASSOCIATION: Radium Institute im. V. G. Khlopin AS USSR.
(Radiyevyy institut im. V. G. Khlopina Akademii nauk SSSR)

AVAILABLE: Library of Congress

Card 3/3

ZHUKOVSKIY, N.N. Cand Phys Math Sci ~~degree~~ -- (diss)

"Study of γ -spectra ^{of} Sb¹²⁴, Pu^{152, 154} and Ag¹¹⁰
~~with the aid of~~ ^{by means} γ -spectrometer with improved focusing,
~~using electron~~ ^{recoil} ~~emission~~ ^{Acad Sci} Len 1958, 6 pp. (Acad Sci USSR.

Radium Inst im V.G. Khlopin ~~in~~ ^(Acad Sci) SSSR) 110 copies. Bibliography
at end of text (15 titles). (KL, 39-58, 106)

$\gamma = \text{gamma}$

ZHUKOVSKIY, N. N. and DZHALEPOV, B. S.

"On the Gamma Spectra of Ag^{110} , Sb^{124} and $Eu^{152,154}$,"

Nuclear Physics, Vol. 6, No. 5, p. 655, 1958, No. Holland Publ. Co.

Abst. The elotron, a recoil electron gamma spectrometer with improved focusing properties, was used to study the gamma radiation from Ag^{110} , Sb^{124} and $Eu^{152,154}$.

Radium Inst., im V. G. Khlopin, Acad. Sci. USSR, Leningrad.

DZHELEPOV, B. S. and ZHUKOVSKIY, N. N. (V. G. Khlopin Radium Institute, USSR Acad. Sci. Leningrad) SHESTOPALOVA, S. A. and UCHEVATKIN, I. F. (D. I. Mendeleyev Research Institute of Metrology, Leningrad.

"Gamma-Ray Spectrum of Radium in Equilibrium with its Decay Products," Nuclear Physics, v. 8,3,(1958) (North-Holland Publishing Co., Amsterdam) pp. 250-264.

Abstract: Results are described of an investigation of the radium gamma-spectrum in equilibrium with its decay products, based on recoil electron measurements in the energy range 150-2530 keV. Fourth-four gamma-lines have been observed, and their relative intensities and the number of quanta per disintegration determined.

SOV/48-22-7-17/26

AUTHORS: Dzhelepov, B. S., Zhukovskiy, N. M., Uchevatkin, I. F.,
Shestopalova, S. A.

TITLE: New Data on the Relative Intensities of the γ -Lines of Ra
in Equilibrium With Its Decay Products (Novyye dannyye ob
otnositel'nykh intensivnostyakh γ -liniy Ra, nakhodyashchegosya
v ravновесии s produktami raspada)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya fizicheskaya, 1958,
Vol. 22, Nr 7, pp. 841-847 (USSR)

ABSTRACT: In order to examine and precise the data from reference 1
on the relative intensities in the spectrum of the γ -radia-
tion of radium C this spectrum was again investigated in the
"elotron" of the Radium Institute (Ref 2). 2 grams of radium
in the compound RaBr_2 served as a source of γ -radiation.
The shape of the source was identical with that one used
in reference 1. The results are as follows: 1) Range from
 ~ 150 to 630 keV: This section of the spectrum up to the line
at 609 keV was investigated for the first time by means of
the recoil electrons. Apart from the well known lines of
radium B at 241,9, 295,2 and 352,0 keV a pronounced excess

Card 1/4

SOV/48-22-7-17/26

New Data on the Relative Intensities of the γ -Lines of Ra in Equilibrium With Its Decay Products

of recoil electrons was observed near the line at 295,5 keV. The decomposition showed that the excess maximum is located at 285 keV. Between the intensive lines at 352 and 609 keV a number of less intensive γ -lines is found. It seems as if some of them correspond with not identified lines from reference 3, that is to say with Nr 68, 70, 77, 78 and 79. If these lines are considered to be K-conversion electrons of radium C, energy values of 386,8, 388,9, 466,7, 471,2 and 484,6 keV are obtained.

2) Range from 630 to 1810 keV: The line at 666 ± 7 keV is clearly visible, the lines at $703,2$ and 721 ± 7 keV appear. The line at 652,4 keV was not found. Apart from the line at 768,7 keV three lines exist in the high energy range: 787,1, 806,3 and 837,8 keV. The following new γ -lines were found: 885 ± 10 , 960 ± 5 and 1050 ± 10 keV. The line at 1541 ± 5 keV was clearly marked. A noticeable broadening of the line at 1764,4 keV and the existence of the lines at 1783,8 and 1790,7 keV (Ref 1) was not ascertained.

3) Range from 1780 to 2530 keV: Apart from the known

Card 2/4

New Data on the Relative Intensities of the γ -Lines of Ra in Equilibrium
With Its Decay Products

SOV/48-22-7-17/26

1848,5 keV-line an electron excess with a maximum near 1860 keV was discovered. This excess can be explained by the presence of the 1862,3 keV line (Ref 1). The existence of the 1900 keV line (Ref 1) was proved. An excess of recoil electrons exists in the range of 2016,7 and 2090 keV. Their intensity is smaller by about a factor of 3 than that given in reference 1.

For the purpose of determining the relative intensities the area of each component, reduced to equal H_0 intervals, was measured. Then corrections were added. The corrections took into account the efficiency of the counters for electrons of different energies, the self-absorption in the source, the wall absorption, and the spectral sensitivity of the apparatus. It was assumed that the intensity of the lines is proportional to these areas. The results show a good agreement. The intensity of the individual strong lines agree within limits of 7 - 10 %. The Graduate students F. A. Predovskiy (LPI) and N. A. Volnova (LGU) assisted in the measurements. There are 4 figures, 1 table, and 6 ref-

Card 3/4

New Data on the Relative Intensities of the γ -Lines of Ra in Equilibrium
With Its Decay Products

SOV/48-22-7-17/26

erences, 2 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii
im. D. I. Mendeleyeva
(All Union Scientific Research Institute of Metrology imeni
D. I. Mendeleyev)
Radiyevyy institut im. V. G. Khlopina Akademii nauk SSSR
(Radium Institute imeni V. G. Khlopin, AS USSR)

Card 4/4

21(7)

AUTHORS:

Voinova, N. A., Dzhelepov, B. S., SOV/48-23-2-3/20
Zhukovskiy, N. N.

TITLE:

Investigation of the γ -Spectrum of Se^{75} Within the Range
200 + 900 kev (Issledovaniye γ -spektra Se^{75} v oblasti 200 + 900keV)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,
Vol 23, Nr 2, pp 185-187 (USSR)

ABSTRACT:

The investigations were carried out by means of the magnetic spectrometers "Rytron" and "Elotron" by use of recoil electrons. Two experimental curves are given in figure 1, which correspond to the γ -spectrum of Se^{75} and were obtained 1) by means of "Rytron" with cellophane target with a surface density of 6.15 mg/cm^2 and 2) by means of "Elotron" with polystyrene target with a surface density of 2.34 mg/cm^2 . By analysis of the curves 5 components with the energies 207, 259, 278, 305 and 402 kev were separated from 2). The weaker range of the spectrum was investigated by means of "Rytron", and the 475 and 570 kev lines were found in addition (Fig 2). For a comparison, the energies and intensities of the γ -lines of Se^{75} obtained from data of other authors are listed in a table (Refs 1, 2, 3, 4, 5). Besides the authors of this

Card 1/2

SOV/48-23-2-3/20

Investigation of the γ -Spectrum of Se^{75} Within the Range 200 + 900 kev

paper, only Zolotavin (Ref 3) found the 475 kev line. The line 570 kev was found also by Van den Bold (Ref 2), Zolotavin (Ref 3) and Langevin-Joliot (Ref 4). There are 2 figures, 1 table, and 5 references, 1 of which is Soviet.

ASSOCIATION: Radiyevyy institut im. V. G. Khlopina Akademii nauk SSSR
(Radium Institute imeni V. G. Khlopin of the Academy of Sciences, USSR)

Card 2/2

24(5),24(7)
AUTHORS:

Voinova, N. A., Dzhelepov, B. S.,
Zhukovskiy, N. N.

SOV/48-23-7-8/31

TITLE:

The γ -Emission of Ta^{182} in the Energy Range of 300-1,500 kev
(γ -izlucheniye Ta^{182} v oblasti energii 300-1500 kev)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,
Vol 23, Nr 7, pp 828-830 (USSR)

ABSTRACT:

The introduction of the present paper mentions in short the results of many investigations of the rotational band of the ground state of W^{182} ; then it is stated that the experiments described were carried out by an electron with the purpose of determining the relative intensity of the γ -lines, at the same time looking for new lines in the range of energy indicated. The measured values are compiled in a diagram (Fig 1), and it is shown that there are practically no lines in the range $h\nu = 300-850$ kev, and that there are 7 lines of different intensities in the range $h\nu = 850-1,350$ kev. Finally, some known lines of low intensity in this range are mentioned. There are 2 figures, 1 table, and 5 references, 2 of which are Soviet.

Card 1/2

The γ -Emission of Ta^{182} in the Energy Range of
300-1,500 kev

SOV/48-23-7-8/31

ASSOCIATION: Radiyevyy institut im. V. G. Khlopina Akademii nauk SSSR
(Radium Institute im. V. G. Khlopin of the Academy of
Sciences, USSR)

Card 2/2

S/048/60/024/03/07/019
B006/B014

AUTHORS: Voinova, N. A., Dshlepov, B. S., Zhukovskiy, N. N.
TITLE: Investigation of the Gamma Radiation of Ag^{110m} in the
Energy Range 0.2 ÷ 2.0 Mev 19 19
PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960,
Vol. 24, No. 3, pp. 291 - 299

TEXT: The article under review was read at the Tenth All-Union Conference on Nuclear Spectroscopy (Moscow, January 19 - 27, 1960). In recent years data on the γ -emission of Ag^{110m} appeared in various papers, inter alia by L. Gustova et al. (Ref. 3) and by the authors of this article (energy range 650 - 1,600 kev). The energies of the γ -lines detected by the various authors in the various energy ranges under consideration are given in the introduction. The authors analyzed again the γ -spectrum of Ag^{110m} in the range 0.2 - 2.0 Mev by means of an elotron. A neutron-activated sample of approximately 11 g served as source. The initial activity of the source was about 0.9 curies. Experimental results are

Card 1/3

✓B

Investigation of the Gamma Radiation of
 $\text{Ag}^{110\text{m}}$ in the Energy Range $0.2 \div 2.0$ Mev

S/048/60/024/03/07/019
B006/B014

compiled in diagrams and tables. The 656-kev lines were used as reference lines. In the range 440 - 1,600 kev 14 lines could be recorded separately. Their intensity exceeded 1 per cent of that of the 656-kev line. An analysis of the experimental curves made on the elotron showed that the ranges 300 - 430 kev and 450 - 600 kev contained no lines with intensities greater than 1 per cent and/or 0.8 per cent of that of the 656-kev line. There was no sign of existence of a 723-kev line in the γ -spectrum of $\text{Ag}^{110\text{m}}$ (as described by Cork et al.), provided its intensity be greater than 1 per cent of that of the 656-kev line. No γ -lines with intensities exceeding 0.3 per cent were found in the range 950 - 1,350 kev. Next, a great number of further details are discussed, such as intensities (Table 1), lifetimes, and multipole types of the various transitions. Further, the results of numerous papers dealing with decay schemes of isobaric nuclei with $A = 110$ are discussed (Fig. 2). The following is dealt with in detail: the quantum characteristics of the excited levels of Cd^{110} and the pertinent intensity equilibrium, the isomeric transitions in Ag^{110} and In^{110} (Table 2 lists the theoretical K/L values and $T_{1/2}$ of the 120-kev transition in In^{110} for various multipole types). Finally,

Card 2/3

✓B

Investigation of the Gamma Radiation of
Ag^{110m} in the Energy Range 0.2 ± 2.0 Mev

S/048/60/024/03/07/019
B006/B014

the actual possibilities of β^+ -decay and of the capture of orbital electrons in Ag^{110m} and Ag¹¹⁰ are discussed. Mention is made of N. Anton'yeva. In conclusion, the authors thank V. P. Prikhodtseva and Yu. V. Khol'nov for putting the rytron at their disposal. There are 2 figures, 2 tables, and 34 references, 7 of which are Soviet.

ASSOCIATION: Radiyevyy institut im. V. G. Khlopina Akademii nauk SSSR
(Radium Institute imeni V. G. Khlopin of the Academy of
Sciences, USSR)

VB

Card 3/3

L 28963-66

EWI(m)/EWP(t)/ETI

IJP(c)

JD/JG

ACC NR: AP6619087

SOURCE CODE: UR/0367/66/003/001/0003/0007

AUTHOR: Voinova, N.A.; Dzhelepov, B.S.; Zhukovskiy, N.N.; Kalinichev, Yu.V.;
Maloyan, A.I.; Sergeyev, A.G.

ORG: Physicotechnical Institute im. A.F. Ioffe, AN SSSR (Fiziko-tekhnicheskiy
institut AN SSSR); Radium Institute, AN SSSR (Radiyevyy institut AN SSSR)

TITLE: Gamma radiation of Eu sup 152 in the 1380-1900 keV energy range

SOURCE: Yadernaya fizika, v. 3, no. 1, 1966, 3-7

TOPIC TAGS: gamma radiation, europium, gamma spectrometer, radioisotope

ABSTRACT: The γ -spectrum of Eu¹⁵² in the 1380-1900 keV energy range was investigated on the magnetic Compton γ -spectrometer electron of the Physics-Engineering Institute of the USSR Academy of Sciences. New γ -lines with energies of 1510, 1577, 1680, and 1756 keV were found and their relative intensities determined. The energy of the 1411.9 ± 0.7 keV γ -line in Eu¹⁵² was determined more precisely and this line was separated from the 1407.6 keV γ -line in Eu¹⁵². The 1680 keV 1^+ level in Sm¹⁵² and the 1756 keV 1^- level in Gd¹⁵² are studied. The decay scheme is discussed. Based on author's English abstract. Orig. art. has: 1 table and 3 figures. [JPRS]

SUB CODE: 13, 20 / SUBM DATE: 17Apr65 / ORIG REF: 002 / OTH REF: 005

Card 1/1 B.G.

L 31298-66 EWT(m)

ACC NR: AP5022571

SOURCE CODE: UR/0048/66/030/003/0394/0402

AUTHOR: Dzhalepov, B. S.; Dmitriyev, A. G.; Zhukovskiy, N. N.; Kaloyan, A. G.

ORG: none

TITLE: Gamma radiation of Eu sup 156 in the 600 to 2400 kev range

SOURCE: AN SSSR. Izvestiya. Seriya Fizicheskaya, v. 30, no. 3, 1966, 394-402

TOPIC TAGS: gamma radiation, gamma spectrum, europium, spectrometer, neutron irradiation, electron spectrum, radioactive decay scheme, gamma transition

ABSTRACT: In continuation of previous work the gamma spectrum of Eu¹⁵⁶ was studied in the energy range of 600 to 2400 kev with a magnetic spectrometer. An enriched sample of Eu¹⁵⁶ was irradiated with thermal neutrons (2×10^{14} cm⁻²/sec) for 1000 hours, then aged 200 days. The Eu¹⁵⁶ spectrum was obtained by subtracting the spectrum of Eu¹⁵²⁺¹⁵⁴. The recoil electron spectrum is plotted for the entire range of energies and the most probable decay scheme is shown in a figure. Results of measured relative gamma-ray intensities are compared with those of other authors. Methods used are shown to be more accurate than those of other authors. Four new gamma transitions are introduced: $h\nu = 907, 943, 1028,$ and 1686 kev. The schemes for these transitions are discussed.

The authors thank V. F. Rodionov and T. I. Sidorova for assistance in making the measurements. Orig. art. has: 2 figures and 2 tables. [JPIS]

SUB CODE: 18,20/SUBM DATE: none/ ORIG REF: 004/ OTH REF: 007

Card 1/1 CC

L-31408-66 EWT(m).

ACC NR: AP6022572

SOURCE CODE: UR/0048/66/030/003/0403/0406

AUTHOR: Dzhelepov, B. S.; Zhukovskiy, N. N.; Maloyan, A. G.; Prikhodtseva, V. P.

ORG: none

TITLE: Gamma spectrum of La^{140} in the energy range of 300 to 1610 keV

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 3, 1966, 403-406

TOPIC TAGS: gamma spectrum, lanthanum, lanthanum oxide, neutron irradiation, thermal neutron, spectral line, radioactive decay, gamma transition

ABSTRACT: New studies were carried out on the gamma spectrum of La^{140} with an electron having a resolution of $\Delta H/H = 1.2\%$ (at 1 MeV) in the range of 300 to 1610 keV. The gamma ray source was a lanthanum oxide target irradiated with thermal neutrons. Curves plotted of the overall spectrum and of the region of interest are shown. New weak transitions are clearly observed at 434 and 726 keV. The 635 keV line observed by other authors was not seen and is assumed to have an intensity of less than 1.0% per decay. Detailed studies are not made in the range of 970 to 1500 keV, so the new weak transitions previously reported in the literature at 1088, 1120, 1415, and 1680 keV are not confirmed but are assumed to have an intensity of less than 0.3% per decay.

Data obtained for the various transitions are tabulated and compared with the results of other authors. The conversion line at 1595.5 ± 1.5 keV is found to be singlet rather than a doublet as previously supposed. The authors thank E. P. Grigor'yev and M. P. Avotina for allowing them to use the $\pi/2$ spectrometer, L. N. Moskvina for preparing the sources, and T. I. Sidorova for help in measuring the electron. Orig.

art. has: 4 figures and 1 table. /SPRS/

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 004

Card 1/1 CC

L 44037-66 ENT(M)/EXP(L)/BTI JPR(S) 37-03
ACC NR: AP6032229 SOURCE CODE: UR/0367/66/003/005/0785/0793

AUTHOR: Dzhelepov, B. S.; Zhukovskiy, N. N.; Maloyan, A. G. 38
ORG: none B
TITLE: Gamma-radiation of 12.3-year ²⁷Eu sup 152
SOURCE: Yadernaya fizika, v. 3, no. 5, 1966, 785-793

TOPIC TAGS: gamma spectrum, radioactive decay, europium

ABSTRACT: The γ -spectrum of 12.3-year ¹⁵²Eu is investigated with the help of photoritron and elotron magnetic spectrometers. 29 γ -lines were observed and their energy and relative intensities were measured with an accuracy higher than in previous papers. The 296, 360, 674, 720, 840, 1253, and 1454 keV lines were found for the first time. The α_k -values for 15 γ -transitions were determined more precisely. The decay scheme of ¹⁵²Eu is given: the γ -transition intensities and lg ft values are obtained from the results of the present investigation. The authors thank Yu. V. Khol'nov for making possible the research on the γ -spectrum ¹⁵²Eu on the photoritron magnetic spectrometer. Further thanks go to A. G. Dmitriyev, E. A. Arutyunyan and T. I. Sidorovaya for assistance with the measurements and processing of the experimental data. Orig. art. has: 4 figures, 3 formulas and 3 tables. [Based on authors' Eng. abst.] [JPRS: 36,712]

SUB CODE: 20, 18 / SUBM DATE: 13May65 / ORIG REF: 008 / OTH REF: 008

Card 1/1 blg

0919 1254

I. GUTIN-07 GUTIN(M)/GUTIN(I)/GUTIN(I) JG/JG

ACC NR: A17002794

SOURCE CODE: UR/0048/66/030/003/1265/1276

AUTHOR: Dzhelepov, E. S.; Dmitriyev, A. G.; Zhukovskiy, N. N.; Maloyan, A. G.

ORG: none

TITLE: Gamma spectrum of Eu sup 154

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 8, 1966, 1265-1276

TOPIC TAGS: gamma radiation, gamma transition, gamma spectrum

ABSTRACT: γ -radiation of Eu^{154} was investigated with the aid of a magnetic spectrometer. All the isolated γ -lines of Eu^{154} and their relative intensities were tabulated. Altogether, 32 γ -lines were detected in the region $h\nu > 200$ kev, of which only 14 lines had been previously known. The conversion coefficients for transitions to Gd^{154} can be determined by utilizing the data on the relative intensities of the K-conversion and γ -lines accompanying the decay of Eu^{154} on condition that the conversion coefficient of at least one transition is known. The scheme of Gd^{154} levels is complemented with two new levels with the energies 1617 and 1663 kev. The first level is deexcited by three transitions $h\nu = 1493, 1248, \text{ and } 616$ kev to the levels $2^+, 2^+, \text{ and } 4^+$ with the energies 123, 371, and 998 kev respectively. The level with 1663-kev energy makes it possible to place the observed γ -transitions having energies of 1539, 847, and 616 kev: they are arrayed between this level and the levels $2^+, 2^+, \text{ and } 4^+$ with the energies of 123, 816, and 1049 kev

Card 1/2

L 09235-67

ACC NR: AP7002794

respectively. The balance of intensities of γ -transitions with respect to Gd^{154} levels was utilized to determine the percentile ratio of the β -components of Eu^{154} and to calculate the values of $\log ft$, which were found to be anomalously high. Orig. art. has: 7 figures 2 formulas and 3 tables. [JPRS: 39,040]

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 004 / OTH REF: 014

Card 2/2

DZHELEPOV, B.S.; ZHUKOVSKIY, N.N.; MALOYAN, A.G.

Gamma spectrum of Eu^{152*} having a half-life of 9.2 hours.
Iad. fiz. 1 no.6:941-947 Je '65. (MIRA 18:6)